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Module

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Description (English machine translation)

94-001 DE 07.Jan.1994 module the innovation refers to a module in accordance with the generic term of the requirement 1.

In the data processing technology are connection modules for the installation in wiring boxes admit (product information of the company BTR Telecom, D-78176 Blumberg, in the valley 1, "UAE-DAT" universal connection units data processing technology, 5/1993).

With two the 8-poligen Westernbuchsen (RJ 45) \* \* \* \* v \* \* \*

\*-- rope-permitted wiring boxes contain level arranged Schraubklemmem. Available space into the standard-it does not permit wiring boxes so far, with user-friendly 45"- inclination of the two 8-poligen Westernbuchsen, the gumption connected with many advantages-wedge-connection technology to use. Application the gumption-wedge-connection technology is so far only in 8 poligen connection units and/or with an installation of the Westernbuchsen for a senkrechte plug direction well-known.

From therefore it it is task of the innovation, a connection-to develop module, which application the gumption wedges-technology in particular in 16-poligen wiring boxes with inclined/slanted Westernbuchsen made possible and with which the disadvantages of the conditions \* \* \* \* \* 4 \* f \* \* \* \* \* the solution of this task results from the characteristic characteristics of the requirement 1.

The arrangement of two rows of strips, preferably bent in 90degrees, makes application the solder-free, strip-free and screwless gumption-wedge-for technology possible on smallest area in the standard-wiring boxes of the data-and communicationses. The well-known advantages of this technology can in 16-poligen remarks of the wiring boxes to be used. In addition, the module can be applied as separate connection unit to e.g. printed circuit boards.

The breakdown of the module in an upper section with a cover and into a lower part, which with one another in 90degrees-bending rests is, permits also after the installation in standard-wiring box the wiring with a conventional wiring tool. Bending the parts permits it to each other to use the wiring tool under the dose framework comfortably in order to connect the wires with the contacts of the lower part.

By the suggested arrangement waiters-and lower part with ribs, slots and surfaces, by the training the organization the longing oath bent by taps and by-wedge-contacts in the lower part, are kept away as far as possible the contacting forces from the solder joints and taken up from the housing.

\* \* \* f \*\*\*< \* \* oe ' \* further ones favourable arrangements of the innovation result from the unteranspruechen. The innovation is in the following described on the basis a remark example of a module more near. Show: Fig. 1: the perspective back opinion of the module, Fig. 2: the perspective front view of the module after Fig.

1, Fig. 3: the perspective Unteransicht of the module after the Fig. 1 and 2, Fig. 4: the perspective front view of the upper section of the module after the Fig. 1 to 3, \* \*\*\*< \* \* \* \* \* t Fig. 5: the perspective Unteransicht of the upper section of the module after Fig.4, Fig. 6: the perspective Unteransicht of the lower part of the module after the Fig. 1 to 3, Fig. 7: the perspective back opinion of the lower part of the module after Fig. 6, Fig. 8: the perspective plan view on the lower part of the module after the Fig. 6 and 7, Fig. 9: the front view gumption-wedge-of a contact in the lower part of the module after the Fig. 6 to 8, Fig. 10: the plan view on the contact after Fig.9, Fig. 11: the front view gumption-wedge-of a contact in the upper section connection of the module after the Fig. 4,5 and Fig. 12: the plan view on the contact after Fig. 11.

The figures 1 to 3 show front as perspective Zusaxnmenbau - Zeichmung the back -,and Unteransicht of a module, consisting of

an upper section 1 with a cover 3 and a lower part 2. Waiters and the lower part 1.2 are with tap 4 to the mechanical connections with a not represented printed circuit board equipped. Waiters and slots 5.6 point the lower part 1.2 up, into the longing oathwedge-contacts 7.8 are brought in (Fig.9 to 12).

By means of a circulating rib 9 with rest noses 10 at the upper section 1 (Fig.5) and a circulating groove 11 at the lower part 2 (Fig.8) that upper section 1 and the lower part 2 after the equipment with the gumption-wedge-contacts 7.8 (Fig.9 to 12) in the angle of 90degrees are rested with one another. The wiring of the upper section 1 takes place perpendicularly from above and those of the lower part 2 from the front in horizontal direction in each case with a not represented well-known wiring tool for the gumption-wedge - connection technology. If by 90degrees of deviating resting angles of both parts 1.2 one selected, then the handling of the wiring tool would be made more difficult.

In the figures the structure of the upper section 1 represented 4 and 5 with the cover 3 is. The cover 3 is connected by a film joint 12 underneath the slot 5 with the upper section 1. By the use of a suitable plastic the einstueckige production is possible. With the cover 3 the free \* 9 is covered \* \* \* \* \* < \* \* \* \* \* 1 ends of the wired wires (not represented) in the lower part 2 and thus possible short-circuits are avoided surely. The cover 3 is provided with break-throughs 13 to the visual inspection of the correct allocation and Beschaltung of the lower part 2 with the wires which can be attached. By the tooth-comblike execution engaging the cover 3 makes 3 for the cover possible into the slots 6 of the wired lower part 2 and thus a space-saving building method without additional space requirement (Fig.2). Over the in such a way taken off slots 6 of the lower part 2 the wires from the slots 5 of the upper section 1 can be outward led away, without a risk of short circuit exists.

In the upper section 1 to the lateral support 7 (Fig.11,12) two each are rib-arranged each gumption-wedge-of contact, between which the contacts 7 up to the not represented printed circuit board are led (Fig.4).

The figures 6 to 8 show the structure of the lower part 2 of a module. For contact guidance slots 16 are intended as well as assembly slots 17 for bringing in the gumption-wedge-of contacts 8. A surface 18 serves the support of the contacts 7 from the upper section 1.

In the figures 11.12 the gumption-wedge-is represented contact 7 for to upper section the 1. The contact 7 is formed from the well-known slot 19, which in 45degrees-position to the connector lug 20 stands. The contact \* \* Q.

into upper section is brought the 1 from down. The connector lug 20 of the contact 7 reaches up to the not represented printed circuit board, on which it is soldered.

The figures 9 and 10 show the gumption-wedge-contact 8 for the lower part 2. The slot 21 is arranged to the connector lug 22 bent in 90degrees in 45"- a position. The contact 8 is brought into the lower part 2 from the rear. The connector lug 22 of the contact 8 is likewise led to the printed circuit board and soldered there.

The module is as 16 poliges LSA-module e.g. in data wiring boxes (double discharge opening doses) applicable and made possible within this range the full use of the advantages solder -, screws-and strip-free connection technology.

The module can be used both in Unterputz-and in Aufputzdosen. The rib 10, which intervenes in the groove 11 of the lower part 2, arranged in the upper section 1, ensures a good support of the forces arising with a wiring of the module. Together with in the upper section the 1 and lower part 2 trained taps 4 and the training of the contacts 8 in the lower part 2 all arising contacting forces are kept away from the solder joints and steered on the housing. Thus a reliable contacting at the solder joints is secured.

Crown AG 07.Jan.1994 (94-001 DE) BEZUEGSZEICHENLISTE  
upper section lower part cover tap slot slot gumption-wedge  
contact gumption-wedge-contact rib rest nose groove film joint  
break-through of teeth rib slot assembly slot surface slot connector  
lug slot connector lug

#### Claims (English machine translation)

1. Module, in particular for wiring boxes of the data-and communicationes with inclined/slanted RJ-link sockets, marked by strips, by the fact that two rows of strips (1,2) with contact contacts (7,8) are to each other bent arranged.
2. Module according to requirement 1, by the fact characterized that the two rows of strips (1,2) are connected to

longing oath-wedge-of contacts (7,8) as an upper section (1) and a lower part (2) trained and in an angle of preferably 90degrees and in each case in 45degrees bending contained.

3. Module according to the requirements 1 and 2, by the fact characterized that that exhibits upper section (1) a cover (3) for the slots (6) of the lower part (2).

4. Module according to requirement 3, by the fact characterized that the cover (3) is connected with the upper section (1) einstueckig by a film joint (12).

5. Module according to the requirements 3 and 4, by the fact characterized that the cover (3) is comblike trained and engages in the folded down condition into the clamping slots (6) of the lower part (2).

6. Module according to the requirements 1 to 3, by the fact characterized that upper section (1) and the lower part (2) exhibit that taps (4) to the mechanical connections with the printed circuit board and that a groove (11) and a surface (18) exhibit the lower part (2) to the support of the contacts (7) of the upper section (1) and upper section (1) a circulating rib (9) with rest noses (10).

7. Module according to the requirements 1 to 6, by the fact characterized that in the upper section (1) ribs (15) are intended and in the lower part (of 2) slots (16) to the lateral support of each contact (7,8) up to the printed circuit board.

8. Module according to the requirements 1 to 7, by the fact characterized that those gumption-wedge-of contacts (8) in the lower part (2) one preferably 90degrees-bending exhibit.